

Essential Utilities (WTRG US)

Buy: Acquisitions in the bag for growth

- ◆ Water and wastewater infrastructure business relatively unaffected by COVID-19
- ◆ Peoples deal completed; DELCORA on track for 2022; regulatory mechanisms to ease rate case lag; proforma 2020
- ◆ Maintain Buy rating; TP increased from USD47.5 to USD50.0

COVID-19 update: The American Water Works Association (AWWA) published the results of an online survey on the impact of the COVID-19 emergency on its member organisations on 10 April. According to the survey, utilities are reacting swiftly to the crisis to guarantee essential services and business continuity, but two thirds expect revenue/cash flow problems within the next two months. The two factors causing financial uncertainty are changes in water demand from non-domestic customers and customer payments during the coronavirus pandemic. However capital investment in asset rehabilitation remains relatively unaffected.

Essential Utilities (EU) has already made two significant acquisitions: The focus for 2020-2022 will be on integrating these and successfully delivering rate cases. Infrastructure surcharges and test years for rate cases help to reduce the regulatory lag. 52% of EU's capex is eligible for these. This provides clarity on the cash flows and reduces uncertainties around translation of rate base growth into earnings. With the completion of the Peoples deal and the gas heating season in Q1 lowering the seasonal contribution to earnings for Q2 and Q3, the company will be reporting earnings for 2020 on a pro-forma basis to improve transparency.

Maintain Buy rating with increased target price, from USD47.5 to USD50.0: We value Essential Utilities via three methodologies: DCF, dividend yield, and the average of PE multiple and SOP (rate-based) valuations. Taking the average of the three approaches gives us our target price of USD50.0 (previously USD47.5). In our DCF valuation, we have updated our beta assumption from 0.58 to 0.60 to be in line with market peers and have updated the model for FY2019 results. Our cost of capital is updated from 4.3% to 5.9%. These changes leads to a fall in the DCF valuation from USD47.5 to USD41.1. In our PE multiple-based valuation, we have updated the multiple in line with market peers, from 29.8x to 30.0x. This leads to an increase in the PE-multiple valuation, from USD45.8 to USD46.8. Our SOP valuation rises from USD44.1 to USD57.1, driven by the updated rate base, and the average of the two rises from USD45.8 to USD52. In our yield valuation, we update our yield from 2% to 1.75%, again in line with peers. This results in an increase in the Yield valuation from USD49.4 to USD57.8. Overall, these changes lead to an increase in our TP from USD47.5 to USD50.0. Our TP implies 15.3% upside and we reiterate our Buy rating as we believe the combination of regulated investment and earnings growth is attractive.

Equities Water Utilities

United States



MAINTAIN BUY

TARGET PRICE (USD)

50.00

PREVIOUS TARGET (USD)

47.50

SHARE PRICE (USD)

43.36

(as of 17 Apr 2020)

UPSIDE/DOWNSIDE

+15.3%

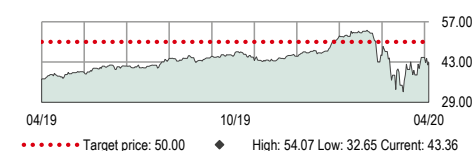
MARKET DATA

Market cap (USDm)	9,683	Free float	100%
Market cap (USDm)	9,683	BBG	WTRG US
3m ADTV (USDm)	67	RIC	WTRG.N

FINANCIALS AND RATIOS (USD)

Year to	12/2019a	12/2020e	12/2021e	12/2022e
HSBC EPS	1.04	1.56	1.68	1.81
HSBC EPS (prev)	1.50	1.59	1.65	na
Change (%)	-30.7	-2.0	1.7	na
Consensus EPS	1.48	1.56	1.64	1.77
PE (x)	41.7	27.8	25.9	23.9
Dividend yield (%)	2.2	2.3	2.5	2.7
EV/EBITDA (x)	21.9	17.0	16.2	15.4
ROE (%)	7.6	8.3	7.4	7.8

52-WEEK PRICE (USD)



Source: Refinitiv IBES, HSBC estimates

Verity Mitchell*

Analyst
HSBC Bank plc
verity.mitchell@hsbcib.com
+44 20 7991 6840

Adam Dickens*

Analyst
HSBC Bank plc
adam.dickens@hsbcib.com
+44 20 7991 6798

Rohit Bhalgat*

Associate
Bangalore

* Employed by a non-US affiliate of HSBC Securities (USA) Inc, and is not registered/ qualified pursuant to FINRA regulations

Disclosures & Disclaimer

This report must be read with the disclosures and the analyst certifications in the Disclosure appendix, and with the Disclaimer, which forms part of it.

Issuer of report: HSBC Bank plc

View HSBC Global Research at:
<https://www.research.hsbc.com>

Financials & valuation: Essential Utilities

Buy

Financial statements

Year to	12/2019a	12/2020e	12/2021e	12/2022e
Profit & loss summary (USDm)				
Revenue	890	1,895	2,097	2,230
EBITDA	497	824	897	973
Depreciation & amortisation	-157	-239	-267	-284
Operating profit/EBIT	340	585	631	689
Net interest	-131	-153	-167	-188
PBT	212	432	463	501
HSBC PBT	209	432	463	501
Taxation	13	-35	-37	-40
Net profit	225	397	426	461
HSBC net profit	225	397	426	461
Cash flow summary (USDm)				
Cash flow from operations	339	706	707	754
Capex	-550	-950	-950	-950
Cash flow from investment	-605	-5,225	-950	-950
Dividends	-189	-257	-278	-300
Change in net debt	-1,352	3,108	521	496
FCF equity	-212	-244	-243	-196
Balance sheet summary (USDm)				
Intangible fixed assets	64	939	939	939
Tangible fixed assets	7,224	11,335	12,018	12,684
Current assets	2,011	2,154	2,182	2,201
Cash & others	1,869	1,869	1,869	1,869
Total assets	9,360	14,489	15,201	15,886
Operating liabilities	1,468	1,680	1,723	1,751
Gross debt	3,077	6,186	6,707	7,203
Net debt	1,208	4,317	4,838	5,334
Shareholders' funds	3,881	5,689	5,837	5,998
Invested capital	5,962	10,879	11,548	12,204

Ratio, growth and per share analysis

Year to	12/2019a	12/2020e	12/2021e	12/2022e
Y-o-y % change				
Revenue	6.2	113.0	10.7	6.3
EBITDA	5.7	65.8	8.9	8.4
Operating profit	5.3	72.0	7.8	9.2
PBT	18.6	104.2	7.3	8.1
HSBC EPS	-3.4	50.2	7.3	8.1
Ratios (%)				
Revenue/IC (x)	0.2	0.2	0.2	0.2
ROIC	6.4	6.4	5.2	5.3
ROE	7.6	8.3	7.4	7.8
ROA	4.1	4.5	3.9	4.1
EBITDA margin	55.9	43.5	42.8	43.6
Operating profit margin	38.2	30.9	30.1	30.9
EBITDA/net interest (x)	3.8	5.4	5.4	5.2
Net debt/equity	31.1	75.9	82.9	88.9
Net debt/EBITDA (x)	2.4	5.2	5.4	5.5
CF from operations/net debt	28.0	16.4	14.6	14.1
Per share data (USD)				
EPS Rep (diluted)	1.04	1.56	1.68	1.81
HSBC EPS (diluted)	1.04	1.56	1.68	1.81
DPS	0.94	1.01	1.09	1.18
Book value	17.97	22.36	22.94	23.58

Valuation data

Year to	12/2019a	12/2020e	12/2021e	12/2022e
EV/sales	12.2	7.4	6.9	6.7
EV/EBITDA	21.9	17.0	16.2	15.4
EV/IC	1.8	1.3	1.3	1.2
PE*	41.7	27.8	25.9	23.9
PB	2.4	1.9	1.9	1.8
FCF yield (%)	-2.2	-2.5	-2.5	-2.0
Dividend yield (%)	2.2	2.3	2.5	2.7

* Based on HSBC EPS (diluted)

ESG metrics

Environmental Indicators	12/2019a	Governance Indicators	12/2019a
GHG emission intensity*	n/a	No. of board members	8
Energy intensity*	n/a	Average board tenure (years)	7.0
CO ₂ reduction policy	Yes	Female board members (%)	25
Social Indicators		Board members independence (%)	87.5
Employee costs as % of revenues	n/a		
Employee turnover (%)	n/a		
Diversity policy	Yes		

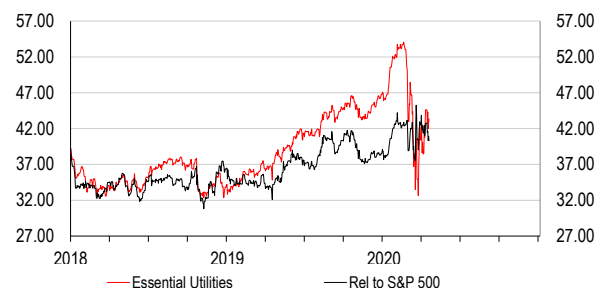
Source: Company data, HSBC

* GHG intensity and energy intensity are measured in kg and kWh respectively against revenue in USD '000s

Issuer information

Share price (USD)	43.36	Free float	100%
Target price (USD)	50.00	Sector	Water Utilities
RIC (Equity)	WTRG.N	Country/Region	United States
Bloomberg (Equity)	WTRG US	Analyst	Verity Mitchell
Market cap (USDm)	9,683	Contact	+44 20 7991 6840

Price relative



Source: HSBC

Note: Priced at close of 17 Apr 2020

Acquisitions in the bag for growth

- ◆ Water and wastewater infrastructure business relatively unaffected by COVID-19
- ◆ Peoples deal completed; DELCORA on track for 2022; regulatory mechanisms to ease rate case lag; proforma 2020 results
- ◆ Maintain Buy rating; TP increased from USD47.5 to USD50.0

Uncertainties and risks due to COVID-19 pandemic

The American Water Works Association (AWWA) published the results of an online survey on the impact of the COVID-19 emergency on its member organisations on 10 April. According to the survey, utilities are reacting swiftly to the crisis to guarantee essential services and business continuity, but two thirds expect revenue/cash flow problems within the next two months. The two factors causing financial uncertainty are changes in water demand from non-domestic customers and customer payments during the coronavirus pandemic.

The two major challenges that investor-owned utilities identified were ensuring social distancing of the work force and supply chain issues for PPE. In terms of regulatory compliance, an issue that was noted was problems in accessing sampling sites. Most utilities have implemented measures to help customers: more than 90% have suspended water shut-offs, and nearly 50% have restored service to suspended accounts.

Three-pronged investment proposition

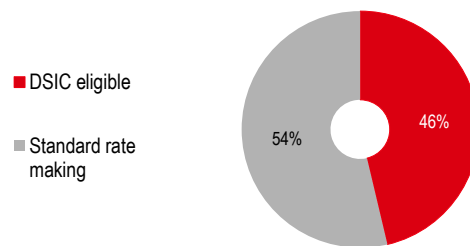
Essential Utilities has core competencies in infrastructure investment (pipes, plants, etc), regulatory affairs and operational excellence. Using these as pillars, Essential has created a 3-pronged growth strategy.

1. Municipal initiative: Driver of growing foundational water and wastewater business. This is the primary focus for the company right now.
2. Strategic M&A: Opportunistic pursuit of large, regulated utility/infrastructure targets – the company delivered on this by the Peoples gas acquisition recently completed and the DELCORA transaction which is expected to complete regulatory approvals by 2022.
3. MBAs (Market Based Activities): Complementary to regulated business. Capitalises on broader infrastructure renewals but is probably going to be less of a priority given the current challenges.

Attractive capex recovery mechanisms

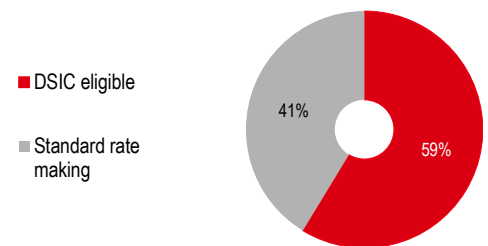
Infrastructure surcharges and test years for rate cases help to reduce regulatory lag. 52% of EU's capex is eligible for these. This provides clarity on the cash flows and reduces uncertainties around translation of the rate base growth into earnings.

Water capex: 2020-22 estimates



Source: WTRG company results presentations - FY2019

Gas capex: 2020-22 estimates



Source: WTRG company results presentations - FY2019

From the table below we can see that most of the states that Essential Utilities operates in have opted for these mechanisms, which is a positive development for the company.

State wise regulations for capex recovery

State	Allowed surcharge
Water	
Pennsylvania	7.5% W; 5%WW
Indiana	10%
Ohio	12.75% W; 9% WW
New Jersey	5%
Illinois	2.5% annual avg increase
North Carolina	5%
Gas	
Pennsylvania	5%
Kentucky	No cap

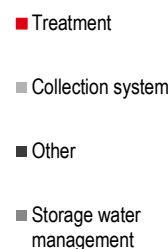
Source: WTRG company results presentations - FY2019

US water infrastructure needs offer opportunities for Aqua

In the charts below we can see the EPA estimates of the US water infrastructure investment needs.

Water - USD473bn


Source: WTRG company results presentations - FY2019

Wastewater - USD271bn


Source: WTRG company results presentations - FY2019

Acquisitions – strong pipeline and primary focus for the company

From the table below we can see that, even with the major deal of DELCORA it has signed, Essential has a decent pipeline of acquisitions. However, due to current COVID-19 pandemic, the closure of some of these may well be delayed into 2021.

Acquisitions - closed and pending at FY2019 results

	State	Type	Total customers	Rate base (USD '000s)
Closed				
Skyline	Illinois	W / WW	752	3550
Phoenixville	Pennsylvania	W	529	2500
Grant Park	Illinois	WW	540	2300
Cheltenham	Pennsylvania	WW	9887	44558
Campbell	Ohio	W	3200	7535
Total			14908	60443
Pending				
New Garden	Pennsylvania	WW	2106	29500
East Norriton	Pennsylvania	WW	4952	21000
DELCORA	Pennsylvania	WW	198000	276500
Total			205058	327000

Source: WTRG company results presentations - FY2019

Guidance for 2020

The guidance for 2020 is as follows:

- Adjusted proforma income per diluted common share (non-GAAP) of USD1.53 to USD1.58. This illustrative guidance includes the full-year effects of the Peoples acquisition as if this transaction closed on January 1, 2020, by including an estimate of the results of Peoples for the period in 2020 prior to closing, excluding transaction-related expenses and the effects of transaction-related commitments to issue rate credits to utility customers.
- 3-year earnings CAGR 5-7% for 2019 through 2022, with the base being 2019 adjusted income per share (non-GAAP).

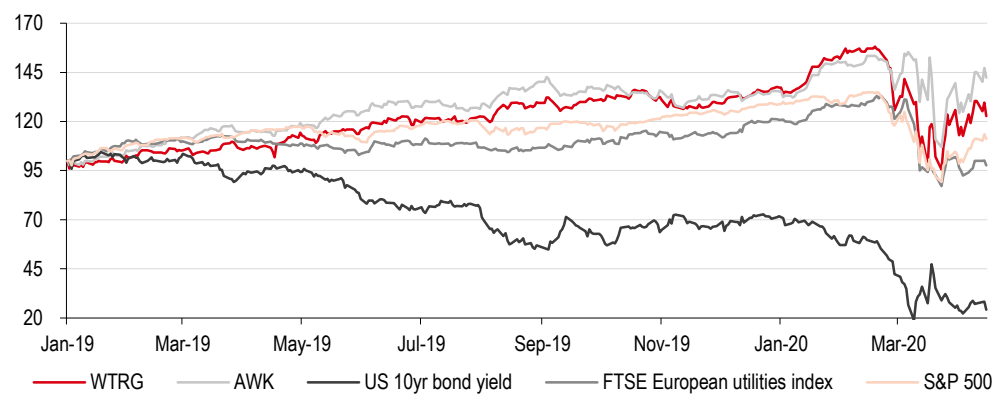
- Infrastructure investment of approximately USD550m in 2020 for communities served by the water operations.
- Infrastructure investment of approximately USD400m in 2020 for communities served by the gas operations.
- Infrastructure investment of approximately USD2.8bn through 2022 in existing water and gas operations to rehabilitate and strengthen systems.
- Rate base compound annual growth rate of 6 to 7% through 2022 in water; and 8 to 10% in gas through to 2022.
- Total annual water customer growth of between 2 and 3% on average, depending upon regulatory approval.

Performance against peers

Essential's share price has outperformed the S&P 500 by 12% since 1 January 2019. On 2020e PE, it is trading at a discount to its water peer group but in line with some of the US electricity utilities according to Refinitiv Datastream. This reflects, in our view, its future multi-utility status.

One more point to note is that the US Treasury 10-year yield has fallen sharply. WTRG, as a defensive utility, should be inversely correlated to bond yields.

Performance of WTRG vs AWK vs UST 10yr vs FTSE European utilities index vs S&P 500



Source: Refinitiv Datastream

Changes in estimates

We have updated our model for FY2019 results and the preliminary impact of COVID-19. We have also updated the model for Peoples proforma numbers for 2020 and included the DELCORA deal in our numbers from 2022. We have also updated the number of shares for 2020 to 254.4m from 215.9m in 2019 according to company guidance associated with the Peoples-related equity offering in 2019.

Change in estimates (USDm)

	2020e	2021e	2022e
EBIT			
Revised	585	631	689
Previous	578	604	
Change	1%	4%	
Net income			
Revised	397	426	461
Previous	399	412	
Change	0%	3%	
EPS (USD)			
Revised	1.56	1.68	1.81
Previous	1.59	1.65	
Change	-2%	2%	
DPS (USD)			
Revised	1.01	1.09	1.18
Previous	0.99	1.07	
Change	2%	2%	

Source: HSBC estimates

Valuation and risks

We value Essential Utilities via three methodologies: DCF, dividend yield, and the average of PE multiple and SOP (rate-based) valuations. Taking the average of the three approaches gives us our target price of USD50.0 (previously USD47.5). We have updated the model for FY2019 results.

- In our DCF valuation, we have updated our beta assumption from 0.58 to 0.60 to be in line with market peers. We have also updated the cost of debt from 3.9% to 8.5% and the marginal tax rate from 11% to 13%. These changes lead to updated cost of capital, from 4.3% to 5.9% and a fall in the DCF valuation from USD47.5 to USD41.1.
- In our PE multiple-based valuation, we have updated the multiple in line with market peers, from 29.8x to 30.0x. Our SOP valuation rises from USD44.1 to USD57.1, driven by updated rate base, and the average of the two rises from USD45.8 to USD52.
- In our Yield valuation, we update our yield from 2% to 1.75%, again in line with peers. This results in an increase in the Yield valuation from USD49.4 to USD57.8.

Overall, these changes lead to an increased TP from USD47.5 to USD50.0. Our TP implies 16.7% upside; we reiterate our Buy rating as we believe the combination of regulated investment and earnings growth is attractive.

Summary of valuation (USD)

Particulars	New	Previous
Current price as on 17-Apr-20	43.4	NA
DCF (updated estimates, higher cost of capital)	41.1	47.5
Yield 1.75% (previously 2%)	57.8	49.4
SOP & Peer multiple (updated estimates and multiples)	51.9	45.8
Target price (average rounded)	50.0	47.5
Upside/ downside to target price	15.3%	NA
Rating	Buy	Buy

Source: HSBC estimates

WACC inputs and DCF valuation

WACC inputs		Equity Valuation	USDm
Cost of debt		+ DCF value	13,873
Pre-tax cost of debt	8.5%	+ ST marketable assets	0
Marginal tax rate	13.0%	+ Value of associates	0
Cost of equity		+ Other assets	878
Risk-free rate	3.0%	EV (asset side)	14,751
Equity risk premium	3.0%	- Net debt (+ if Net cash)	(4,288)
Additional risk		- Quasi debt (pension)	0
Beta (previously 0.58)	0.60	- Value of minorities	0
Debt - 37%	7.8%	Total non-equity claims	(4,288)
Equity - 63%	4.8%	Value of equity	10,463
Cost of capital	5.9%	Value per share (USD)	41.1

Source: HSBC estimates

Sum-of-the-parts (SOP) and PE multiple valuations

USDm	2020e Rate Base
Regulated water	
Pennsylvania	3,682
Ohio	368
Illinois	382
Texas	319
New Jersey	214
North Carolina	245
Indiana	90
Virginia	83
Regulated gas	2,451
Total	7,834
Price to rate base (industry multiple)	18,802
Non-regulated (2020e peer average PE multiple)	9
Net debt 2020e, pensions & minority	(4,288)
Estimated equity value	14,523
Estimated equity value per share (USD)	57.1
PE multiple valuation	
2020e earnings per share (USD)	1.56
2020e PE sector average	30.0
Value per share	46.8

Average of rate base valuation and PE multiple valuation **52.0**

Source: HSBC estimates

Downside risks

Essential Utilities fails to achieve the desired rate case revisions and infrastructure surcharges; it lacks organic growth from asset replacement; it cannot take advantage of the Fair Market Value legislation opportunity; its dividend grows at a lower rate than we assume.

It is not able to gain the Fair Market Value premium required in the systems it wants to acquire in Pennsylvania. Its current acquisitions of systems – New Garden and Limerick – are facing challenges to the premium proposed by Aqua.

Disclosure appendix

Analyst Certification

The following analyst(s), economist(s), or strategist(s) who is(are) primarily responsible for this report, including any analyst(s) whose name(s) appear(s) as author of an individual section or sections of the report and any analyst(s) named as the covering analyst(s) of a subsidiary company in a sum-of-the-parts valuation certifies(y) that the opinion(s) on the subject security(ies) or issuer(s), any views or forecasts expressed in the section(s) of which such individual(s) is(are) named as author(s), and any other views or forecasts expressed herein, including any views expressed on the back page of the research report, accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: Verity Mitchell and Adam Dickens

Important disclosures

Equities: Stock ratings and basis for financial analysis

HSBC and its affiliates, including the issuer of this report ("HSBC") believes an investor's decision to buy or sell a stock should depend on individual circumstances such as the investor's existing holdings, risk tolerance and other considerations and that investors utilise various disciplines and investment horizons when making investment decisions. Ratings should not be used or relied on in isolation as investment advice. Different securities firms use a variety of ratings terms as well as different rating systems to describe their recommendations and therefore investors should carefully read the definitions of the ratings used in each research report. Further, investors should carefully read the entire research report and not infer its contents from the rating because research reports contain more complete information concerning the analysts' views and the basis for the rating.

From 23rd March 2015 HSBC has assigned ratings on the following basis:

The target price is based on the analyst's assessment of the stock's actual current value, although we expect it to take six to 12 months for the market price to reflect this. When the target price is more than 20% above the current share price, the stock will be classified as a Buy; when it is between 5% and 20% above the current share price, the stock may be classified as a Buy or a Hold; when it is between 5% below and 5% above the current share price, the stock will be classified as a Hold; when it is between 5% and 20% below the current share price, the stock may be classified as a Hold or a Reduce; and when it is more than 20% below the current share price, the stock will be classified as a Reduce.

Our ratings are re-calibrated against these bands at the time of any 'material change' (initiation or resumption of coverage, change in target price or estimates).

Upside/Downside is the percentage difference between the target price and the share price.

Prior to this date, HSBC's rating structure was applied on the following basis:

For each stock we set a required rate of return calculated from the cost of equity for that stock's domestic or, as appropriate, regional market established by our strategy team. The target price for a stock represented the value the analyst expected the stock to reach over our performance horizon. The performance horizon was 12 months. For a stock to be classified as Overweight, the potential return, which equals the percentage difference between the current share price and the target price, including the forecast dividend yield when indicated, had to exceed the required return by at least 5 percentage points over the succeeding 12 months (or 10 percentage points for a stock classified as Volatile*). For a stock to be classified as Underweight, the stock was expected to underperform its required return by at least 5 percentage points over the succeeding 12 months (or 10 percentage points for a stock classified as Volatile*). Stocks between these bands were classified as Neutral.

*A stock was classified as volatile if its historical volatility had exceeded 40%, if the stock had been listed for less than 12 months (unless it was in an industry or sector where volatility is low) or if the analyst expected significant volatility. However, stocks which we did not consider volatile may in fact also have behaved in such a way. Historical volatility was defined as the past month's average of the daily 365-day moving average volatilities. In order to avoid misleadingly frequent changes in rating, however, volatility had to move 2.5 percentage points past the 40% benchmark in either direction for a stock's status to change.

Rating distribution for long-term investment opportunities

As of 21 April 2020, the distribution of all independent ratings published by HSBC is as follows:

Buy	55%	(31% of these provided with Investment Banking Services)
Hold	36%	(30% of these provided with Investment Banking Services)
Sell	9%	(24% of these provided with Investment Banking Services)

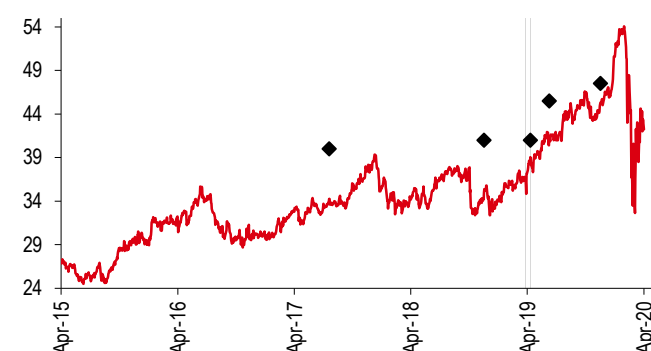
For the purposes of the distribution above the following mapping structure is used during the transition from the previous to current rating models: under our previous model, Overweight = Buy, Neutral = Hold and Underweight = Sell; under our current model Buy = Buy, Hold = Hold and Reduce = Sell. For rating definitions under both models, please see "Stock ratings and basis for financial analysis" above.

For the distribution of non-independent ratings published by HSBC, please see the disclosure page available at <http://www.hsbcnet.com/gbm/financial-regulation/investment-recommendations-disclosures>.

Share price and rating changes for long-term investment opportunities

Essential Utilities (WTRG.N) share price performance

USD Vs HSBC rating history



Source: HSBC

Rating & target price history

From	To	Date	Analyst
Buy	Restricted	15 Apr 2019	
Restricted	Buy	30 Apr 2019	Verity Mitchell
Target price	Value	Date	Analyst
Price 1	40.00	08 Aug 2017	Verity Mitchell
Price 2	41.00	06 Dec 2018	Verity Mitchell
Price 3	Restricted	15 Apr 2019	
Price 4	41.00	30 Apr 2019	Verity Mitchell
Price 5	45.50	28 Jun 2019	Verity Mitchell
Price 6	47.50	06 Dec 2019	Verity Mitchell

Source: HSBC

To view a list of all the independent fundamental ratings disseminated by HSBC during the preceding 12-month period, please use the following links to access the disclosure page:

Clients of Global Research and Global Banking and Markets: www.research.hsbc.com/A/Disclosures

Clients of HSBC Private Banking: www.research.privatebank.hsbc.com/Disclosures

HSBC & Analyst disclosures

Disclosure checklist

Company	Ticker	Recent price	Price date	Disclosure
ESSENTIAL UTILITIES	WTRG.N	42.24	20 Apr 2020	1, 5, 6

Source: HSBC

- 1 HSBC has managed or co-managed a public offering of securities for this company within the past 12 months.
- 2 HSBC expects to receive or intends to seek compensation for investment banking services from this company in the next 3 months.
- 3 At the time of publication of this report, HSBC Securities (USA) Inc. is a Market Maker in securities issued by this company.
- 4 As of 31 March 2020, HSBC beneficially owned 1% or more of a class of common equity securities of this company.
- 5 As of 29 February 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of investment banking services.
- 6 As of 29 February 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-investment banking securities-related services.

- 7 As of 29 February 2020, this company was a client of HSBC or had during the preceding 12 month period been a client of and/or paid compensation to HSBC in respect of non-securities services.
- 8 A covering analyst/s has received compensation from this company in the past 12 months.
- 9 A covering analyst/s or a member of his/her household has a financial interest in the securities of this company, as detailed below.
- 10 A covering analyst/s or a member of his/her household is an officer, director or supervisory board member of this company, as detailed below.
- 11 At the time of publication of this report, HSBC is a non-US Market Maker in securities issued by this company and/or in securities in respect of this company
- 12 As of 15 Apr 2020, HSBC beneficially held a net long position of more than 0.5% of this company's total issued share capital, calculated according to the SSR methodology.
- 13 As of 15 Apr 2020, HSBC beneficially held a net short position of more than 0.5% of this company's total issued share capital, calculated according to the SSR methodology.

HSBC and its affiliates will from time to time sell to and buy from customers the securities/instruments, both equity and debt (including derivatives) of companies covered in HSBC Research on a principal or agency basis or act as a market maker or liquidity provider in the securities/instruments mentioned in this report.

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking, sales & trading, and principal trading revenues.

Whether, or in what time frame, an update of this analysis will be published is not determined in advance.

Non-U.S. analysts may not be associated persons of HSBC Securities (USA) Inc, and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts.

Economic sanctions imposed by the EU and OFAC prohibit transacting or dealing in new debt or equity of Russian SSI entities. This report does not constitute advice in relation to any securities issued by Russian SSI entities on or after July 16 2014 and as such, this report should not be construed as an inducement to transact in any sanctioned securities.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at www.hsbcnet.com/research. HSBC Private Banking clients should contact their Relationship Manager for queries regarding other research reports. In order to find out more about the proprietary models used to produce this report, please contact the authoring analyst.

Additional disclosures

- 1 This report is dated as at 22 April 2020.
- 2 All market data included in this report are dated as at close 17 April 2020, unless a different date and/or a specific time of day is indicated in the report.
- 3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking, Principal Trading, and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
- 4 You are not permitted to use, for reference, any data in this document for the purpose of (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments, (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument, and/or (iii) measuring the performance of a financial instrument or of an investment fund.

Production & distribution disclosures

1. This report was produced and signed off by the author on 21 Apr 2020 11:10 GMT.
2. In order to see when this report was first disseminated please see the disclosure page available at <https://www.research.hsbc.com/R/34/WqsnTcj>

Disclaimer

Legal entities as at 11 February 2020

'UAE' HSBC Bank Middle East Limited, Dubai; 'HK' The Hongkong and Shanghai Banking Corporation Limited, Hong Kong; 'TW' HSBC Securities (Taiwan) Corporation Limited; 'CA' HSBC Securities (Canada) Inc.; HSBC France, S.A., Madrid, Milan, Stockholm; 'DE' HSBC Trinkaus & Burkhardt AG, Düsseldorf; 000 HSBC Bank (RR), Moscow; 'IN' HSBC Securities and Capital Markets (India) Private Limited, Mumbai; 'JP' HSBC Securities (Japan) Limited, Tokyo; 'EG' HSBC Securities Egypt SAE, Cairo; 'CN' HSBC Investment Bank Asia Limited, Beijing Representative Office; The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch; HSBC Securities (South Africa) (Pty) Ltd, Johannesburg; HSBC Bank plc, London, Tel Aviv; 'US' HSBC Securities (USA) Inc, New York; HSBC Yatirim Menkul Degerler AS, Istanbul; HSBC México, SA, Institución de Banca Múltiple, Grupo Financiero HSBC; HSBC Bank Australia Limited; HSBC Bank Argentina SA; HSBC Saudi Arabia Limited; The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR; The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch; PT Bank HSBC Indonesia; HSBC Qianhai Securities Limited; HSBC Brasil S.A. – Banco de Investimento

Issuer of report

HSBC Bank plc
 8 Canada Square
 London, E14 5HQ, United Kingdom
 Telephone: +44 20 7991 8888
 Fax: +44 20 7992 4880
 Website: www.research.hsbc.com

In the UK this document has been issued and approved by HSBC Bank plc ("HSBC") for the information of its Clients (as defined in the Rules of FCA) and those of its affiliates only. It is not intended for Retail Clients in the UK. If this research is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate.

HSBC Securities (USA) Inc. accepts responsibility for the content of this research report prepared by its non-US foreign affiliate. All U.S. persons receiving and/or accessing this report and wishing to effect transactions in any security discussed herein should do so with HSBC Securities (USA) Inc. in the United States and not with its non-US foreign affiliate, the issuer of this report. In Singapore, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch for the general information of institutional investors or other persons specified in Sections 274 and 304 of the Securities and Futures Act (Chapter 289) ("SFA") and accredited investors and other persons in accordance with the conditions specified in Sections 275 and 305 of the SFA. Only Economics or Currencies reports are intended for distribution to a person who is not an Accredited Investor, Expert Investor or Institutional Investor as defined in SFA. The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch accepts legal responsibility for the contents of reports pursuant to Regulation 32C(1)(d) of the Financial Advisers Regulations. This publication is not a prospectus as defined in the SFA. This publication is not a prospectus as defined in the SFA. It may not be further distributed in whole or in part for any purpose. The Hongkong and Shanghai Banking Corporation Limited Singapore Branch is regulated by the Monetary Authority of Singapore. Recipients in Singapore should contact a "Hongkong and Shanghai Banking Corporation Limited, Singapore Branch" representative in respect of any matters arising from, or in connection with this report. Please refer to The Hongkong and Shanghai Banking Corporation Limited Singapore Branch's website at www.business.hsbc.com.sg for contact details.

In Australia, this publication has been distributed by The Hongkong and Shanghai Banking Corporation Limited (ABN 65 117 925 970, AFSL 301737) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). Where distributed to retail customers, this research is distributed by HSBC Bank Australia Limited (ABN 48 006 434 162, AFSL No. 232595). These respective entities make no representations that the products or services mentioned in this document are available to persons in Australia or are necessarily suitable for any particular person or appropriate in accordance with local law. No consideration has been given to the particular investment objectives, financial situation or particular needs of any recipient.

This publication has been distributed in Japan by HSBC Securities (Japan) Limited. It may not be further distributed, in whole or in part, for any purpose. In Hong Kong, this document has been distributed by The Hongkong and Shanghai Banking Corporation Limited in the conduct of its Hong Kong regulated business for the information of its institutional and professional customers; it is not intended for and should not be distributed to retail customers in Hong Kong. The Hongkong and Shanghai Banking Corporation Limited makes no representations that the products or services mentioned in this document are available to persons in Hong Kong or are necessarily suitable for any particular person or appropriate in accordance with local law. All inquiries by such recipients must be directed to The Hongkong and Shanghai Banking Corporation Limited. In Korea, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch ("HBAP SLS") for the general information of professional investors specified in Article 9 of the Financial Investment Services and Capital Markets Act ("FSCMA"). This publication is not a prospectus as defined in the FSCMA. It may not be further distributed in whole or in part for any purpose. HBAP SLS is regulated by the Financial Services Commission and the Financial Supervisory Service of Korea. This publication is distributed in New Zealand by The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR.

This document is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment. HSBC has based this document on information obtained from sources it believes to be reliable but which it has not independently verified; HSBC makes no guarantee, representation or warranty and accepts no responsibility or liability as to its accuracy or completeness. The opinions contained within the report are based upon publicly available information at the time of publication and are subject to change without notice. From time to time research analysts conduct site visits of covered issuers. HSBC policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Nothing herein excludes or restricts any duty or liability to a customer which HSBC has under the Financial Services and Markets Act 2000 or under the Rules of FCA and PRA. A recipient who chooses to deal with any person who is not a representative of HSBC in the UK will not enjoy the protections afforded by the UK regulatory regime. Past performance is not necessarily a guide to future performance. The value of any investment or income may go down as well as up and you may not get back the full amount invested. Where an investment is denominated in a currency other than the local currency of the recipient of the research report, changes in the exchange rates may have an adverse effect on the value, price or income of that investment. In case of investments for which there is no recognised market it may be difficult for investors to sell their investments or to obtain reliable information about its value or the extent of the risk to which it is exposed.

In Canada, this document has been distributed by HSBC Securities (Canada) Inc. (member IIROC), and/or its affiliates. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offense. In Brazil, this document has been distributed by HSBC Brasil S.A. – Banco de Investimento ("HSBC Brazil"), and/or its affiliates. As required by Instruction No. 598/18 of the Securities and Exchange Commission of Brazil (Comissão de Valores Mobiliários), potential conflicts of interest concerning (i) HSBC Brasil and/or its affiliates; and (ii) the analyst(s) responsible for authoring this report are stated on the chart above labelled "HSBC & Analyst Disclosures".

HSBC Bank plc is registered in England No 14259, is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange. (070905)

If you are an HSBC Private Banking ("PB") customer with approval for receipt of relevant research publications by an applicable HSBC legal entity, you are eligible to receive this publication. To be eligible to receive such publications, you must have agreed to the applicable HSBC entity's terms and conditions ("KRC Terms") for access to the KRC, and the terms and conditions of any other internet banking service offered by that HSBC entity through which you will access research publications using the KRC. Distribution of this publication is the sole responsibility of the HSBC entity with whom you have agreed the KRC Terms.

If you do not meet the aforementioned eligibility requirements please disregard this publication and, if you are a customer of PB, please notify your Relationship Manager. Receipt of research publications is strictly subject to the KRC Terms, which can be found at <https://research.privatebank.hsbc.com/> – we draw your attention also to the provisions contained in the Important Notes section therein.

© Copyright 2020, HSBC Bank plc, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of HSBC Bank plc. MCI (P) 077/12/2019, MCI (P) 016/02/2020

[1144879]